



Journal of Theoretical and Applied Electronic
Commerce Research

E-ISSN: 0718-1876

ncerpa@utalca.cl

Universidad de Talca
Chile

Rondán-Cataluña, Francisco Javier; Arenas-Gaitán, Jorge; Ramírez-Correa, Patricio
Travel Buying Behavior in Social Network Site Users: to Buy Online vs. Offline
Journal of Theoretical and Applied Electronic Commerce Research, vol. 10, núm. 1, enero, 2015, pp.
49-62
Universidad de Talca
Curicó, Chile

Available in: <http://www.redalyc.org/articulo.oa?id=96532237005>

- How to cite
- Complete issue
- More information about this article
- Journal's homepage in redalyc.org

redalyc.org

Scientific Information System
Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal
Non-profit academic project, developed under the open access initiative

Travel Buying Behavior in Social Network Site Users: to Buy Online vs. Offline

Francisco Javier Rondán-Cataluña¹, Jorge Arenas-Gaitán², and Patricio Ramírez-Correa³

¹ University of Seville, Department of Business Management and Marketing, Seville, Spain, rondan@us.es

² University of Seville, Department of Business Management and Marketing, Seville, Spain, jarenas@us.es

³ Universidad Católica del Norte, Business School, Coquimbo, Chile, patricio.ramirez@ucn.cl

Received 31 October 2013; received in revised form 28 March 2014; accepted 16 April 2014

Abstract

The purpose of this research is to examine the variables that influence buying behavior for a sample of social network sites users who are offline buyers of hospitality services. Subsequently, we do the same of social network sites users who are online buyers in the same sector. Finally, we compare both types of clients and discuss their different purchasing behavior. Logistic regression is used to model the dichotomous outcome variables. The dependent variable was to buy or not to buy a tourist service and the independent variables were: the social network sites use, social identity, altruism, telepresence, and Word-of-Mouth. The data set was collected in Chile and Spain from a sample of on-line questionnaires. The main result of this study is the clear difference in consumer behavior between people who buy online tourist services and those who buy these services in travel agents or other traditional channels. The main contribution of this paper deals with the influence of social network sites on offline and online shopping in the hospitality sector.

Keywords: Social network sites, Hospitality service, Buying behavior, WOM, Telepresence

1 Introduction

Marketing communications have changed forever. The Internet and social networks are the favorite media choices for young people, for whom computers, tablets and mobiles are commonplace [20]. The Internet is particularly powerful in certain segments of the service industry, such as tourism, music, etc. For example, online guest ratings are increasingly important in hotel selection by customers [53]. Information technology has had specifically profound impacts on how consumers select online services. As some authors have pointed out [12], [69], the efficacy of Twitter, Facebook and other social network sites (SNS) in dealing with service customers and their impact on consumer behavior should be thoroughly studied. Some recent studies examine how hotels are using SNS as a marketing tool [51]. This study aims to fill this gap by analyzing the differences in purchase behavior among online and offline travel buyers who are SNS users.

Web 2.0 media, such as online photo albums, personal blogs, specialist travel blogs and SNS have transformed the tourism industry into one that is largely in the public domain [6], [43]. Therefore, the potential audience has greatly expanded beyond the traditional family and friends to all the internet audience or, at least, virtual communities. Online travel communities represent a great opportunity for travel searchers to find out what other people think about potential destinations and facilities (e.g., hotels, restaurants, attractions). As a consequence, these communities are causing significant changes in consumer behavior in the travel industry, as travelers tend to rely more on other travelers' opinions and recommendations to plan their routes and make their decisions [12].

Within the scope of tourism, this investigation encompasses a number of research streams. The first includes Web 2.0 - a growing and absolutely necessary marketing channel in the tourism industry- which has remained less studied due to its novelty [34]. According to the social character of these information technology tools, the social identity theory is especially adequate for this research, as some authors have pointed out [12], [40]. As a second major line of research, this paper addresses the word-of-mouth communication in the online context provided by SNS. The topic of WOM is discussed in relation to buyers of travel services.

In order to study the SNS impact on clients, it is absolutely necessary to include social variables, such as social identity and altruism, and telepresence, which measure the social context of people engaged in SNS. This is especially relevant if we analyze the purchase behavior of SNS users. Therefore, an examination of some relevant social variables related to SNS users is offered in the literature review.

In order to shed more light on this issue, the following objective is proposed: to analyze the purchase behavior of SNS users who buy travel services online and offline. In order to do so, we first examine the variables that influence buying behavior for a sample of SNS users who are offline buyers of tourist services. Subsequently, we do the same for SNS users who are online buyers of travel services. Finally, we compare both types of buyers and discuss their different buying behavior.

The main contribution of this study deals with the influence of SNS on offline and online shopping in the hospitality sector.

The remainder of the paper is structured as follows. Firstly, we present a literature review. Secondly, methodology is described. Next, study results are exhibited. Finally, we provide a discussion and conclusions.

2 Literature Review

This section presents a literature review of buyers in hospitality, SNS and WOM, social variables relating to SNS, and telepresence. Finally, we show the study's analysis framework.

2.1 Influence of SNS on Purchase Behavior

Online and offline buyers are increasingly using the Internet as a source of information to assist them in purchasing, especially in *experience* services, in which information about the experience is difficult to gather before purchasing. Specifically, users of these types of goods tend to rely more on product recommendations from other users. Hedonic goods are purchased for *socio-emotional* benefits and experiences such as fantasy, fun and pleasure. Travel and hospitality services fall into the category of hedonic goods [11]. According to [56], consumers are more affected by recommendations for an experience product/service than for a tangible or utilitarian product/service. In addition, those who check product/service recommendations are more likely to buy than those who do not so. Furthermore, the impact of thoughts on SNS can be spread more extensively and faster than that of other channels. Therefore, some users' opinions taken from SNS can significantly impact other users' buying decisions or their thoughts on many firms [70].

In order to clarify the influence of SNS on purchasing online travel services it is necessary to review their antecedents. In theory, [67] the main factors influencing the consumer online buying decision in the travel and

tourism field are identified: the customer's attitude (the perceived convenience, the perceived merchandise options, and the perceived transaction), the quality of the web site design, the information, the system and service quality, customer satisfaction and consumer trust. An interesting article [14] highlights the importance of endorser and product features when a user becomes a fan of a product or service. The success of Social Marketing policies depends on the type of endorser and if the product is hedonic or utilitarian. These authors affirm that SNS permit and enable the conception and sharing of consumer-generated content, including user-initiated marketing activities that directly influence the purchase. Other studies have shown that the website's image and usability directly affects the users' online purchase intentions of many services [17], [41]. In a digital atmosphere networks enable the exchange among consumers of pioneering digital products as well as product suggestion. This phenomenon considerably affects purchasing behavior [37]. These networks complete a central role not only in disseminating information by WOM, but also in permitting the transmission of new products through SNS. In fact, some authors demonstrate the effect on product/service acquisition of tie strength and the number of ties by evaluating social influences and WOM [37]. Particularly in the tourism sector, SNS could help both consumers and the tourist firms. The former can fulfill some of their requirements, such as looking for information and advice or scheduling and buying travel proficiently. The latter should increase their market share and success due to the consumers' positive messages [12].

Social variables related to the Social Identity Theory, such as social identity and altruism, are particularly relevant in the consumer behavior of SNS users. In addition, telepresence is an unusual incorporation to SNS studies, but we believe that the sense of being present in a virtual environment might influence the behavior of SNS users. The conceptual background of this study is based on the proposition that purchasers who more profusely use SNS and WOM, and at the same time have higher levels of social identity, altruism and telepresence tend to buy travel services online. On the contrary, those who less profusely use SNS and WOM and have lower levels of social identity, altruism and telepresence tend to buy travel services offline. Figure 1 shows the study's analysis framework. This framework proposes to investigate the influence of SNS usage, social identity, altruism, telepresence, and word-of-mouth on buying tourist services, both offline and online. In a first analysis (left): how do the five independent variables affect SNS users who are offline buyers of tourist services? And in a second analysis (right): how do the five independent variables affect SNS users who are online buyers of travel services?

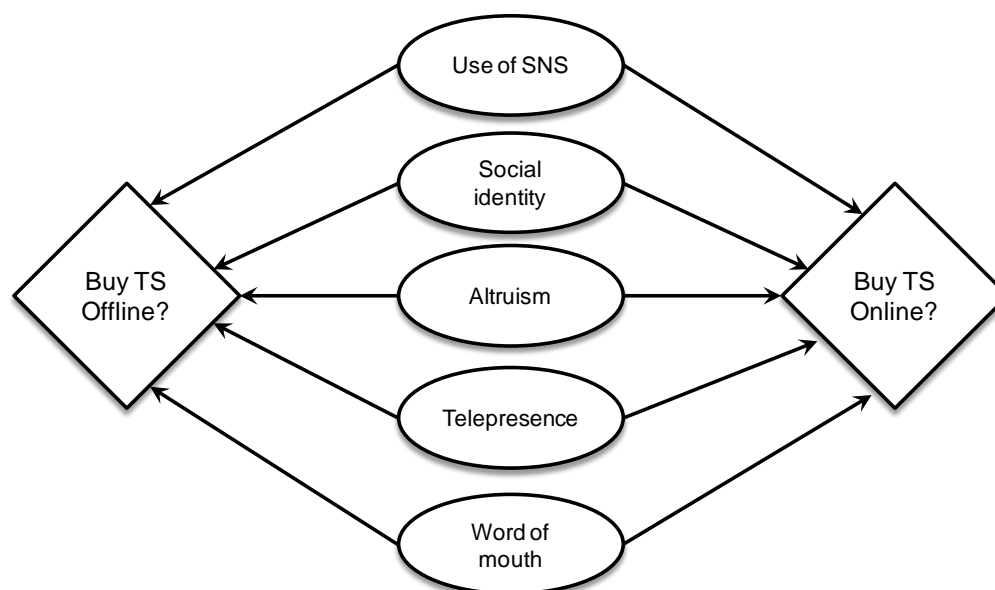


Figure 1: Relationships analyzed

According to the literature review, the influence of SNS on the online shopping of many services is a fresh topic to research and needs to be widely developed.

2.2 SNS and WOM

SNS have turn into one of the utmost common social communications channels, contacting millions of clients at a worldwide level and the influence of WOM in Web 2.0 is a snowballing phenomenon. SNS have altered the mode users interrelate with each other and buy products or services [3], [19]. Furthermore, SNS facilitate companies' understanding of market tendencies (collecting information from markets), and disseminate information to other consumers [32]. The social network setting provides an attractive background to study WOM. The sites make easy-to-use instruments available for current users to attract others to connect with the network. The electronic recording of these referrals opens a new insight into the effects of WOM [64]. As a result, SNS provide users with a tool for seeking unbiased product and service information. In addition, it allows them to give their own consumption-related

advice. With the increasing use of social media and online forums, WOM has become an essential component in many consumers' purchase decisions [50].

WOM is a widely studied topic in the marketing literature, but nowadays it is particularly important due to its application in Web 2.0 and online social networks [64]. eWOM can overwhelm conventional constraints of WOM, such as the fact that WOM often implies private communications and can be hard to follow [33].

Arndt [4] was a pioneer who dug into the effect of WOM on customer behavior. He characterized WOM as spoken, person-to-person conversation between a receiver and a communicator whom the receiver identifies as non-commercial, regarding a brand, product or service. Clients usually participate in WOM communications for miscellaneous reasons - e.g., anxiety reduction, advice seeking, product involvement, and altruistic motives [46]. Earlier research proposes that WOM is more adequate than information from commercial sources (for instance, TV advertising) because it is recognized as being a relatively impartial source of information [55] for any product or service. Contacts in SNS particularly tend to be perceived as more trustworthy than marketers, in spite of the fact that an increasing number of organizations invest a lot of money in encouraging positive e-WOM in social network sites [36]. Traditionally, WOM is operated by two sides: opinion leaders (information generators) and opinion seekers (those who desire to obtain advice from others which helps them to evaluate products and services) [19], [26].

In [30] eWOM is defined as *any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet* (p.39). e-WOM can take place through multiple forms such as blogs, review sites, and e-mails. However, the most important characteristic is that e-WOM can be spread at a worldwide level through the Internet without geographic or time constraints [19], [30]. As a consequence, cyberspace has assisted managers to present more effective marketing communications than ever before [48]. This might be because potential clients often rely on advice from friends, family and other groups (e-WOM from SNS), particularly when planning to travel to a destination which they have not previously visited [11].

Furthermore, to analyze the relationship between SNS use and the buyer behavior of tourist services is interesting. SNS facilitates members becoming fans of or indeed becoming friends with brands, services, companies or tourist destinations, and this act can provide the brand with very constructive WOM [21]. In order to buy hotel services, users need information about the service, the commentator and they also need a number of different comments [68]. It is expected that SNS users who use SNS more frequently and intensively will tend to buy more tourist services through the Internet because they collect more information about companies, destinations and reviewers.

2.3 Social Variables

SNS users tend to be people who need to become a part of a social group. The study of social groups has been pointed out by the study of social variables, among other features. Many social variables have been analyzed in sociological studies, but in relation to SNS the social identity theory [42], [57] and altruism [35], [52] - two main factors that affect social behavior - have been considered.

2.3.1 Social Identity

The Social Identity Theory has been applied in the arena of online technology, as [13] explained. Previous articles employ the Social Identity Theory to illustrate how people categorize among each other [1]. Social identity has been proposed as a factor affecting the use of a particular technology or system in virtual communities [13], [16], [40], [42], [57]. In the SNS context, social identity is a positive perception of belonging to a community in which people are motivated to interact socially with others, and this has a positive impact on both their intentions to use SNS [16], [57] and their SNS use [42]. Previous research uses the Social Identity Theory to explain how a person identifies with others [1]. Overall, this theory suggests that people materialize a sense of themselves from the groups to which they belong [13]. Furthermore, members of a social group share a collective identity that differs from other identities in which the person is unique and distinctive [5]. Thus, a social identity indicates that individuals believe they are connected to a certain social group and they think that this participation is worthwhile [31]. As a consequence, an identity consciousness is established between members.

Individuals who feel a greater social identity are disposed to recognizing their groups in manners that differentiate them from other groups. These individuals prefer a group that offers them a good self-image [40]. For example, a friend plans to use an SNS to call for a meeting. Nevertheless, the use of the SNS is affected by whether other friends are predisposed to employing it. Furthermore, their usage experiences will be a pattern for them to continuously use it for their other meetings [16].

With regard to the influence of social identity and purchasing, some studies [66] have set out that social influence on SNS can impact customer purchasing decisions, including buying behavior in virtual worlds [27]. However, other articles did not find significant relationships of social influence on the online purchase intention [22]. Therefore, there is not a clear relationship between these variables. This fact enhances the need of further studies about this topic.

2.3.2 Altruism

Altruistic behavior can be defined as behavior that benefits another creature, not closely related, while being apparently detrimental to the creature performing the behavior - benefit and detriment being defined in terms of contribution to inclusive fitness [63].

The literature indicates that altruism can be classified into two types: kin altruism and reciprocal altruism. Kin altruism benefits a genetic relative's chances of survival or reproduction, at the expense of one's own chances. Kin altruism is frequently observed in nature. The degree of relationship is an important parameter in predicting altruism behavior, and this could be explicable in terms of natural selection: altruistic behavior arose from a shared heritable variation [29]. Another mechanism for producing altruism is establishing trust between pairs of individuals who reciprocally help each other. This mechanism is named reciprocal altruism. In essence, reciprocal altruism is an effort to explain the evolution of altruism among individuals who are not related. Specifically, reciprocal altruism is to help other individuals based on the belief that individuals who benefit will return such support in the future. In [63] it is indicated that reciprocal altruism can be chosen even when the beneficiary is so distantly related to the person performing the altruistic act that kin selection can be ruled out. This is the kind of altruism which is more prevalent in SNS. In SNS people who usually give advice about their experiences of purchase or use can do so for several reasons: (a) to recover from a bad experience of purchase or use; (b) to present a very positive experience; or (c) feel bound by the altruism of others who have advised them previously or by the hope that they could be helped in the future. The latter is the idea of altruism in this work, and a novel aspect of this research is that we relate altruism to the purchase of a service, not to the use of new technologies.

Altruism has been found as an important antecedent of the use of certain types of information technologies related to knowledge. For example, in [44] it is shown that altruism is positively related to user attitudes toward answering questions in a Web 2.0 knowledge community. In addition, in [52] altruism is identified as a key success factor in the production processes of contents in Web 2.0. Finally, in [35] it is noted that altruism was found to be an important antecedent to the perceived ease of use of an electronic knowledge repository.

In relation to the link between altruism and purchase intention the majority of studies are focused on *green* products or services. Contradictory results arise from the previous literature, this relationship was not supported for *green* mobile phones [49] but it was for paying a premium for organic foods [9].

However, the influence of these social variables on the behavior of clients who use SNS for getting advice in the hospitality sector is still an unsolved question.

2.4 Telepresence

The concept of telepresence has been applied to a variety of media experiences, including mainly video games and television viewing [7], but this topic has been scarcely used in SNS studies. However, telepresence is related to the sense of being present in a virtual environment, and this fact might influence the behavior of SNS users. Other research demonstrated the significant relationship between telepresence and the perceived usefulness of SNS [54].

Minsky [45] introduced the term telepresence to emphasize the possibility that individuals could feel the sense of being physically transported to a remote work place via tele-operation systems in the early 80s. Since then, several authors have referred to telepresence to explain the sense of being transported by technology [62]. The literature explained that presence is the direct experience of reality and telepresence is the simulated perception of direct experience [60]. Therefore, the concept of telepresence means that individuals feel as if they are located in a place which is remote from where it actually is [38]. In other words, telepresence describes the compelling sense of being present in a virtual environment. This is typical of video games, in which players travel virtually to other realities. According to [60] telepresence scale is formed by two factors, however we use only factor 1 they called Being Present in the Mediated Environment, because it is appropriate for virtual environments such as SNS.

In the Internet context, telepresence has been used both as a factor for the effectiveness of online advertisements [39], [62] and as a factor with a positive effect on the perceived usefulness of SNS [40], [57]. According to these ideas, people who tend to telepresence could have different perceptions of reality when they are interacting with others in SNS, and this personal feature may affect their consumer behavior.

With regard to the relationship between telepresence and purchase, Fiore et al [23] empirically established a significant effect of telepresence in the intention to purchase online. The results of Song et al [59] confirm that telepresence contributes directly to online purchase. However, Park et al [71] could not support this hypothesis. On the other hand, the computational environment of Internet generates interactivity, and this interactivity has the potential of creating telepresence and induces the experience of flow. This experience of flow increases the intention to purchase online [25].

Sometimes customers can shop online and make a purchase, while perhaps they do not have any requests about the product, and they are satisfied with the online customer support they received. However, other customers may

need to visit a brick-and-mortar store because they may need to observe the product which they are bearing in mind before making an ultimate choice. Online and offline purchases have some features that makes them each one of them more suitable for a consumer type and even, for the same consumer, more suitable for certain circumstances [2]. As a consequence of the previous ideas and the contradictory results found in the literature review between the constructs analyzed and online and offline purchases, we set out the following propositions:

- P1: The influence of SNS use on online purchase is different from its influence on offline purchase of travel services.
- P2: The influence of social identity on online purchase is different from its influence on offline purchase of travel services.
- P3: The influence of altruism on online purchase is different from its influence on offline purchase of travel services.
- P4: The influence of telepresence on online purchase is different from its influence on offline purchase of travel services.
- P5: The influence of electronic word-of-mouth on online purchase is different from its influence on offline purchase of travel services.

3 Methodology

This section first presents the sample and the method of collection of the study data, and secondly, the statistical methodology used for the analysis.

3.1 Sample and Data Collection

The empirical research is based on a non-probabilistic sampling method. It is therefore a convenience sample. Specifically, the data set was collected in Chile and Spain from a sample of on-line questionnaires from January 14 to March 15, 2011. We sent three waves of massive e-mails including the link to fill out the questionnaire. The exclusion of invalid questionnaires due to duplications or empty fields provided a final sample size of 783 respondents (145 offline subsamples and 638 online subsamples), who bought tourist services in the previous year and are SNS users. It is noteworthy that 81.1% of this sample bought the tourist service by the Internet. Also, 61.9% of the questionnaires were responded by women. The majority of respondents were Spanish and Chilean and, marginally, from other countries, such as Germany, Brazil, Argentina, USA, and so on. The age of participants in the sample is close to the average of SNS users, ranging from 18 to 62 years old, but predominantly younger people around 25. We did not find significant differences between the mean scores of variables for the Chilean and Spanish sub-samples.

A pilot study (50 respondents) was conducted to confirm the reliability and convenience of the questionnaire intended. All travel buyers and SNS users answering the questionnaire remarked its clarity, readability and ease of understanding. As a result, no modifications in terms of the paraphrasing of items were made.

3.2 Statistical Methodology

Logistic regression, also called logit model, is used to model dichotomous outcome variables. This is a widely-used technique for classifying subjects into two mutually-exclusive exhaustive categories. IBM SPSS Statistics 20 is the software used for analysis. In the logit model, the log odds of the outcome are modeled as a linear combination of the predictor variables. In this paper, two dependent variables are used: (1) SNS users who are offline buyers of tourist services, (2) SNS users who are online buyers of travel services.

Discriminant analysis is more appropriate when the dependent variable is not metric. However, logistic regression is preferable when the dependent variable has only two groups. The main reason is that logistic regression is much more robust when the assumptions of multivariate normality and the equality of variance-covariance matrices are not validated [28]. Also, these assumptions are not validated in this case because this logistic regression has been chosen. The dependent variable was to buy or not to buy a tourist service and the independent variables were: SNS usage (USE), social identity (SI), altruism (ALT), telepresence (TELE), and Word-of-Mouth (WOM).

The measurement scales applied have been widely tested in other investigations (Appendix A). Specifically, the scales proposed by [40] have been adapted to measure the USE construct. The measurements for social identity, altruism were adopted from [58], and telepresence is based on [38]. According to these authors [38], the telepresence scale could be grouped into two factors. However we use only factor 1, which they called Being Present in the Mediated Environment, as it is appropriate for virtual environments such as SNS. The scales

proposed by [65] have been adapted to measure the Word-of-Mouth (WOM). All items were measured using a 7-point Likert-type scale with anchors from *Strongly disagree* to *Strongly agree*. But new variables including the average values of the items of each construct were created, summarizing the information of each construct in each new variable.

In order to validate the reliability and validity of the scales, and to assess the collinearity between independent variables we used WarpPLS 3.0, a PLS-based structural equation modeling software.

4 Results

In this section we first present the result of the analysis of the reliability and validity of the scales and the assessment of collinearity among independent variables, and second, the results of the two subsamples of SNS users analyzed. The first group includes people who did not buy a tourist service (hospitality, travel or excursion) online or via the Internet. The second group consists of those who bought tourist services online.

4.1 Measurement Analysis

Table 1 shows the loadings and cross-loadings between indicators and latent variables. All loadings are greater than 0.7. Table 2 shows two coefficients of reliability, specifically the composite reliability and Cronbach alpha coefficients. All composite reliability coefficients are higher than 0.8, and all the Cronbach alpha coefficients are over 0.7. We can conclude that the scales of independent variables have both acceptable convergent validity and reliability [24], [28].

Table 1: Indicator loadings, cross-loadings, reliability measures, and collinearity estimates

	USE	SI	ALT	TELE	WOM
USE1	.858	-.169	.167	-.094	.041
USE2	.930	-.029	-.033	.028	-.051
USE3	.878	.196	-.128	.062	.014
Si1	.012	.877	-.107	.023	.040
Si2	.025	.926	.093	-.031	-.006
Si3	-.036	.911	.009	.009	-.032
ALT1	-.102	.181	.868	.048	-.014
ALT2	.016	.013	.910	-.011	-.031
ALT3	.088	-.200	.842	-.037	.049
TELE1	.101	.013	.171	.730	-.059
TELE2	.127	-.168	.177	.776	-.081
TELE3	-.074	.026	-.127	.833	.022
TELE4	-.153	.137	-.216	.723	.122
WOM1	-.053	.096	-.016	.055	.882
WOM2	-.039	-.012	-.038	-.016	.922
WOM3	.094	-.084	.056	-.038	.880

The discriminant validity of independent variables was tested by analyzing if the square root of the average variances extracted (AVE) from each variable is greater than the correlations with the rest of the variables [24], see Table 3. We can conclude that the scales of independent variables have discriminant validity.

Table 2: Latent variable coefficients

	USE	SI	ALT	TELE	WOM
Composite reliability coefficients	.919	.931	.906	.851	.923
Cronbach alpha coefficients	.867	.889	.844	.765	.875
Average variances extracted	.790	.818	.763	.588	.801
Variance inflation factors	1.399	1.576	1.218	1.253	1.314

Table 3: Latent variable correlations and square-roots of AVEs (Square roots of AVEs shown on diagonal)

	USE	SI	ALT	TELE	WOM
USE	.889	.489	.263	.316	.324
SI	.489	.905	.413	.286	.373
ALT	.263	.413	.873	.188	.196
TELE	.316	.286	.188	.767	.393
WOM	.324	.373	.196	.393	.895

Finally, variance inflation factor (VIF) was calculated for each of the independent variables (see Table 2). The VIFs are lower than 1.6, this suggests no collinearity [28].

4.2 Offline Sub Sample

Table 4 shows that more than 75% of the SNS users of the offline subsample bought a tourist service last year.

Table 4: Did you buy a tourist service last year?

	Frequency	Percentage	Accumulated Percentage
No	36	24.8	24.8
Yes	109	75.2	100.0
Total	145	100.0	

The Logistic Regression Hosmer and Lemeshow Test is shown in Table 5. This is a goodness-of-fit test, the null hypothesis is that the model adequately fits the data. If the significance of the test is over 0.05, then the model adequately fits the data, as in this case.

Table 5: The Hosmer and Lemeshow test of the offline sample

Step	Chi-square	df	Sig.
1	6.977	8	.539

Table 6 summarizes the roles of the parameters in the model. B is the estimated coefficient, with standard error S.E. The ratio of B to S.E., squared, equals the Wald statistic. If the Wald statistic is significant (i.e., less than 0.05) then the parameter is useful to the model. In this case, there are not variables which have a significant effect on the dependent dichotomous variable: to buy or not to buy a tourist service. These results indicate that users who buy this type of online services in brick-and-mortar travel agents are not influenced by SNS use, social identity, altruism, telepresence and WOM (emitted WOM).

Table 6: Variables in the equation of the offline sample

	B	S.E.	Wald	df	Sig.
Step 1 USE	.100	.166	.361	1	.548
SI	.164	.196	.699	1	.403
ALT	.219	.174	1.579	1	.209
TELE	.267	.186	2.054	1	.152
WOM	-.029	.165	.030	1	.862
Constant	-2.019	.956	4.460	1	.035

4.3 Online Sub Sample

Next, the results of the statistical analysis for people who buy online tourist services are set out. In Table 7 the frequency and percentage of this type of SNS users are shown. 77.1% of this sample bought online tourist services in the previous year.

Table 7: Did you buy a tourist service online last year?

	Frequency	Percentage	Accumulated Percentage
No	146	22.9	22.9
Yes	492	77.1	100.0
Total	638	100.0	

The Hosmer and Lemeshow Logistic Regression Test is shown in Table 8. The model also adequately fits the data as the significance is over 0.05.

Table 8: The Hosmer and Lemeshow test of the online sample

Step	Chi-square	df	Sig.
1	7.791	8	0.454

The results of Table 9 show that two independent variables have a significant effect on the dependent variable because the significance of the Wald statistic is less than 0.05. Word-of-mouth has a positive and significant impact on buying this type of service online, and telepresence has a negative and significant influence on it.

Table 9: The variables in the equation of the online sample

	B	S.E.	Wald	df	Sig.
Step 1 USE	.051	.078	.434	1	.510
SI	-.008	.083	.010	1	.918
ALT	.146	.091	2.573	1	.109
TELE	-.332	.089	13.824	1	.000
WOM	.171	.070	6.005	1	.014
Constant	.737	.516	2.037	1	.154

According to these results, only two of the five suggested propositions are accepted. SNS use, social influence and altruism do not significantly impact the purchase decision in either online or offline channels (propositions 1, 2, and 3 are not accepted). However, propositions 4 and 5 are accepted because telepresence and WOM affect online purchase decisions but not offline purchase decisions.

5 Discussion

The main result of this study is the clear difference in consumer behavior between people who buy online tourist services and those who buy these services in travel agents or other brick-and-mortar shops. The fact that both groups of clients are enrolled in SNS is also to be taken into account.

The objective of the paper was to examine the variables that influence the buying behavior for a sample of SNS users who are offline or online buyers of tourist services and to verify if differences in both groups exist. The results show that telepresence and WOM are the variables that most influence purchasing online tourist services in people connected to SNS. The negative sign of the psychological feature *telepresence* in the regression equation indicates that people who feel as if they were located in a remote place from where they actually are, are not likely to purchase online tourist services. This is to say, online purchasers tend to be more objective and concerned with rational buying decisions [18]. If they feel they are absent or in a virtual world, they do not tend to buy online tourist services. They prefer to put their feet back on the ground and make objective, reasonable, intelligent and reflective choices when they are buying a trip. Other studies, not related to tourism, exhibited an indirect influence between telepresence and purchase intention [61], and even no relationship between them [8]. Further articles [23], [59] showed a direct and positive relationship between online purchase and telepresence. But these research works were focused on online retailers who were trying to provide a fantastic purchase experience. In this research, telepresence is not intended because SNS are not designed to offer virtual worlds: they are communication tools and perhaps the telepresence felt by users depends primarily on their personality characteristics. According to these contradictory results, the influence of telepresence on purchase behavior should be contextualized and analyzed more thoroughly in future research.

With regard to WOM, the positive sign in the model indicates that publishing recommendations of products or services in SNS increases the probability of buying a tourist service. Consequently, people concerned with manifesting their opinions, experiences or knowledge in SNS tend to buy online more - at least tourist services.

However, the variables SNS use, social identity and altruism do not influence purchase behavior in this sample of SNS users in the tourist sector. This fact means that the features which have shown a deep impact on SNS-related models [58],[65] are not relevant in purchase behavior even for potential clients who are connected to SNS. Therefore, the purchase behavior and social network behavior of potential tourist clients are influenced by different variables.

Furthermore, the results highlight the fact that the study's variables were not at all influencing clients who bought offline tourist services. Therefore, online and offline purchase behavior are quite different even for people who share an interest in SNS. Clients of brick-and-mortar travel agents probably tend to be more influenced by personal selling or by their own experience than by e-WOM, referrals or SNS posts.

6 Conclusions

What are the main implications of this research? Firstly, managers of tourism websites selling services have to encourage people to publish their positive opinions and experiences in order to increase the likelihood of purchase. Consequently, the development of Web 2.0 is crucial for the future of the online tourism sector. Furthermore, WOM published in SNS is more effective than in other types of webs because communicators and receivers usually become part of the same real social circle. Therefore, SNS-posted WOM is not anonymous, but is linked to the profile owner and can be viewed by the profile owner's connections if the profile is set for public display. The mutual and de-contextualized nature of interpersonal links between connections and posts on profile pages reduces the propensity of profile owners to distort information [15].

In relation to telepresence, taking into account that this variable negatively influences the likelihood of buying online, these websites should be designed rationally and show well-ordered information and comparisons with other competitors. Online buyers of travel services prefer to be practical, realistic and to stay in the real world while they are connected to SNS. They tend to be more rational. However, telepresence does not affect offline buyers' behavior. There are other variables that influence their purchase behavior that are not related to social variables.

Because of the different purchase behavior between online and offline clients, managers of tourist firms are obliged to maintain, at least, two different distribution channel strategies to cope with these two types of clients.

Nowadays, it is very important for hospitality managers to understand how electronic recommender systems operate. They can thus suggest their services to potential clients through SNS or tourist advisor websites. Furthermore, these managers have to provide an appropriate background for encouraging user-generated content (UGC) and this is likely to be absolutely necessary to be successful in the hospitality sector nowadays and in the near future. They should attract innovative users by encouraging them to furnish more experiences and treat them as opinion leaders [47]. An interesting result of this study is that people who buy travel services online tend to use SNS to post information. If they are satisfied with their purchase experience, their recommendations will probably be positive. However, if they feel disappointed their recommendations will likely be negative. Therefore, purchase experiences of online buyers could affect pre and post purchase perceptions of offline clients. This reasoning shows that online shopping is not only a distribution channel but is also one of communication.

However, UGC could be falsified, in the sense of being published by travel operators or community managers paid by some firm, instead of independent users or travelers. How can consumers be assured that the reviews which they are viewing are in fact independent? Do community managers paid by firms post biased information? Trust in sources of online information is a key-point in order to develop efficient social networks. Independent review sites that depend on UGC try to rise the amount of posters [10], but these posts should be trustworthy. Some studies have demonstrated that the highest level of trust was attained by information provided on State government tourism websites [11], [56]. According to this idea, public authorities would understand the implications of this trust and recognize their responsibility in providing objective and easy-to-access information for online travel consumers.

Finally, this work has some limitations that guide future research. We have used a non-random sampling method and it is necessary to validate and generalize the results using random sampling methods in future investigations. The sample size did not enable us to make generalizations, and it may not hold for different nationalities. To develop cross-cultural studies is an important future research line. Further studies could offer new insights about the contradictory results offered by the previous literature with regard to the influence of telepresence on purchase behavior. In addition, in order to enrich the analysis, it would be very interesting to independently study the buying behavior of readers and disputants (writers) of information posted on SNSs.

References

- [1] M. Akkinen. (2005, September) Conceptual foundations of online communities. Sprouts: Working Papers on Information Systems. [Online]. Available: <http://sprouts.aisnet.org/5-27/>
- [2] M. Arce-Urriza and J. Cebollada, Determinants of channel choice: Online vs offline. An application to a grocery chain, Cuadernos de Economía y Dirección de la Empresa, vol. 16, no. 2, pp. 108-122, 2013.
- [3] J. Arenas-Gaitan, F. J. Rondan-Cataluña and P. E. Ramirez-Correa, Social identity, electronic word-of-mouth and referrals in social network services, Kybernetes, vol. 42, no. 8, pp. 1149-1165, 2013.
- [4] J. Arndt, Role of product-related conversations in the diffusion of a new product, Journal of Marketing Research, vol. 4, no. 3, pp. 291-295, 1967.
- [5] C. B. Bhattacharya, H. Rao and M. A. Glynn, Understanding the bond of identification: An investigation of its correlates among art museum members, Journal of Marketing, vol. 59, no. 4, pp. 46-57, 1995.
- [6] D. Boyd, Why youth (heart) social network sites: The role of networked publics in teenage social life, in Youth, Identity and Digital Media (D. Buckingham, Ed.). Cambridge, MA: The MIT Press, 2009, pp.119-142.
- [7] C. C. Bracken and P. Skalski, Telepresence and video games: The impact of image quality, PsychNology Journal, vol. 7, no. 1, pp. 101-112, 2009.

- [8] E. Bridges and R. Florsheim, Hedonic and utilitarian shopping goals: The online experience, *Journal of Business Research*, vol. 61, no. 4, pp. 309-314, 2008.
- [9] B. C. Briggeman and J. L. Lusk, Preferences for fairness and equity in the food system, *European Review of Agricultural Economics*, vol. 38, no. 1, pp. 1-29, 2011.
- [10] F. Bronner and R. de Hoog, Vacationers and eWOM: Who posts, and why, where, and what?, *Journal of Travel Research*, vol. 50, no. 1, pp. 15-26, 2011.
- [11] L. Burgess, B. Parish and C. Alcock, To what extent are regional tourism organisations (RTOs) in Australia leveraging the benefits of web technology for destination marketing and eCommerce?, *Electronic Commerce Research*, vol. 11, no. 3, pp. 341-355, 2011.
- [12] L. V. Casaló, C. Flavián and M. Guinalíu, Determinants of the intention to participate in firm-hosted online travel communities and effects on consumer behavioral intentions, *Tourism Management*, vol. 31, no. 6, pp. 898-911, 2010.
- [13] L. V. Casaló, C. Flavián, and M. Guinalíu, Antecedents and consequences of consumer participation in on-line communities: The case of the travel sector, *International Journal of Electronic Commerce*, vol. 15, no. 2, pp. 137-167, 2010.
- [14] K. T. T. Chang, W. Chen and B. C. Y. Tan, Advertising effectiveness in social networking sites: Social ties, expertise and product type, *IEEE Transactions on Engineering Management*, vol. 59, no. 4, pp. 634-643, 2012.
- [15] P. Chatterjee, Drivers of new product recommending and referral behaviour on social network sites, *International Journal of Advertising*, vol. 30, no. 1, pp. 77-101, 2011.
- [16] C. M. K. Cheung and M. K. O. Lee, A theoretical model of intentional social action in online social networks, *Decision Support Systems*, vol. 49, no. 1, pp. 24-30, 2010.
- [17] C.-F. Chiang and S. S. Jang, The effects of perceived price and brand image on value and purchase intention: Leisure travelers' attitudes toward online hotel booking, *Journal of Hospitality & Leisure Marketing*, vol. 15, no. 3, pp. 49-69, 2007.
- [18] C.-W. Chu and H.-P. Lu, Factors influencing online music purchase intention in Taiwan: an empirical study based on the value-intention framework, *Internet Research*, vol. 17, no. 2, pp. 139-155, 2007.
- [19] S.-C. Chu and S. M. Choi, Electronic word-of-mouth in social networking sites: a cross-cultural study of the United States and China, *Journal of Global Marketing*, vol. 24, no. 3, pp. 263-281, 2011.
- [20] C. S. Dev, J. D. Buschman and J. T. Bowen, Hospitality marketing: A retrospective analysis (1960-2010) and predictions (2010-2020), *Cornell Hospitality Quarterly*, vol. 51, no. 4, pp. 459-469, 2010.
- [21] Á. Dunne, M.-A. Lawlor and J. Rowley, Young people's use of online social networking sites-a uses and gratifications perspective, *Journal of Research in Interactive Marketing*, vol. 4, No. 1, pp. 46-58, 2010.
- [22] T. Escobar-Rodriguez and E. Carvajal-Trujillo, Online drivers of consumer purchase of website airline tickets, *Journal of Air Transport Management*, vol. 32, no. 1, pp. 58-64, 2013.
- [23] A. M. Fiore, J. Kim and H.-H. Lee, Effect of image interactivity technology on consumer responses toward the online retailer, *Journal of Interactive Marketing*, vol. 19, no. 3, pp. 38-53, 2005.
- [24] C. Fornell and D. F. Larcker, Evaluating structural equation models with unobservable variables and measurement error, *Journal of Marketing Research*, vol. 18, no. 1, pp. 39-50, 1981.
- [25] L. Gao and X. Bai, Online consumer behaviour and its relationship to website atmospheric induced flow: Insights into online travel agencies in China, *Journal of Retailing and Consumer Services*, vol. 21, no. 4, pp. 653-665, 2014.
- [26] M. C. Gilly, J. L. Graham, M. F. Wolfinbarger, and L. J. Yale, A dyadic study of interpersonal information search, *Journal of the Academy of Marketing Science*, vol. 26, no. 2, pp. 83-100, 1998.
- [27] Y. Guo and S. Barnes, Virtual item purchase behavior in virtual worlds: an exploratory investigation, *Electronic Commerce Research*, vol. 9, no. 1-2, pp. 77-96, 2009.
- [28] J. F. Hair Jr, R. E. Anderson and R. L. Tatham, *Multivariate Data Analysis with Readings*. New York, NY: Macmillan Publishing Co., Inc., 1986.
- [29] W. D. Hamilton, The genetical evolution of social behaviour. I, *Journal of Theoretical Biology*, vol. 7, no. 1, pp. 1-16, 1964.
- [30] T. Hennig-Thurau, K. P. Gwinner, G. Walsh, and D. D. Gremler, Electronic word-of-mouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the internet?, *Journal of interactive marketing*, vol. 18, no. 1, pp. 38-52, 2004.
- [31] M. A. Hogg and D. J. Terry, Social identity and self-categorization processes in organizational contexts, *Academy of Management Review*, vol. 25, no. 1, pp. 121-140, 2000.
- [32] Y.-L. Hsu, Facebook as international eMarketing strategy of Taiwan hotels, *International Journal of Hospitality Management*, vol. 31, no. 3, pp. 972-980, 2012.
- [33] S.-C. Hsueh and J.-M. Chen, Sharing secure m-coupons for peer-generated targeting via eWOM communications, *Electronic Commerce Research and Applications*, vol. 9, no. 4, pp. 283-293, 2010.
- [34] C.-Y. Huang, C.-J. Chou, and P.-C. Lin, Involvement theory in constructing bloggers' intention to purchase travel products, *Tourism Management*, vol. 31, no. 4, pp. 513-526, 2010.
- [35] S. Y. Hung, H. M. Lai and W. W. Chang, Knowledge-sharing motivations affecting R&D employees' acceptance of electronic knowledge repository, *Behaviour & Information Technology*, vol. 30, no. 2, pp. 213-230, 2011.
- [36] B. J. Jansen, M. Zhang, K. Sobel, and A. Chowdury, Twitter power: Tweets as electronic word of mouth, *Journal of the American Society for Information Science and Technology*, vol. 60, no. 11, pp. 2169-2188, 2009.
- [37] Y. H. Joo, Y. Kim and S. J. Yang, Valuing customers for social network services, *Journal of Business Research*, vol. 64, no. 11, pp. 1239-1244, 2011.

- [38] T. Kim and F. Biocca, Telepresence via television: Two dimensions of telepresence may have different connections to memory and persuasion, *Journal of Computer-Mediated Communication*, vol. 3, no. 2, pp. 0-0, 1997.
- [39] L. R. Klein, Creating virtual product experiences: The role of telepresence, *Journal of Interactive Marketing*, vol. 17, no. 1, pp. 41-55, 2003.
- [40] O. Kwon and Y. Wen, An empirical study of the factors affecting social network service use, *Computers in Human Behavior*, vol. 26, no. 2, pp. 254-263, 2010.
- [41] R. Law and C. Cheung, A study of the perceived importance of the overall website quality of different classes of hotels, *International Journal of Hospitality Management*, vol. 25, no. 3, pp. 525-531, 2006.
- [42] D. Lee, J. Y. Park, J. Kim, J. Kim, and J. Moon, Understanding music sharing behaviour on social network services, *Online Information Review*, vol. 35, no. 5, pp. 716-733, 2011.
- [43] I. S. Lo, B. McKercher, A. Lo, C. Cheung, and R. Law, Tourism and online photography, *Tourism Management*, vol. 32, no. 4, pp. 725-731, 2011.
- [44] H. P. Lu and Y. C. Hsu, An empirical study on the intention of knowledge buyers and sellers in a web 2.0 knowledge community - using Taiwan yahoo kimo. knowledge+ as the example, presented at the 6th COLLECTeR Iberoamérica, Madrid, June 25-27, 2008.
- [45] M. Minsky, Telepresence, *Omni*, vol. 2, no. 9, pp. 45-51, 1980.
- [46] K. Nusair, A Model of Commitment in B-to-C Travel Context: A Structural Equation Modeling. Ohio: State University, 2007.
- [47] K. K. Nusair, A. Bilgihan, and F. Okumus, The role of online social network travel websites in creating social interaction for gen y travelers, *International Journal of Tourism Research*, vol. 15, no. 5, pp. 458-472, 2013.
- [48] T. Osenton, *Customer Share Marketing: How the World's Great Marketers Unlock Profits from Customer Loyalty*. Upper Saddle River, NJ: FT Press, 2002.
- [49] A. Paladino and S. Ng, An examination of the influences on green mobile phone purchases among young business students: an empirical analysis, *Environmental Education Research*, vol. 19, no. 1, pp. 118-145, 2013.
- [50] I. S. Pantelidis, Electronic meal experience: A content analysis of online restaurant comments, *Cornell Hospitality Quarterly*, vol. 51, no. 4, pp. 483-491, 2010.
- [51] K. V. Phelan, H.-T. Chen and M. Haney, Like and check-in: How hotels utilize facebook as an effective marketing tool, *Journal of Hospitality and Tourism Technology*, vol. 4, no. 2, pp. 134-154, 2013.
- [52] P. Prasarnphanich and C. Wagner, The role of wiki technology and altruism in collaborative knowledge creation, *Journal of Computer Information Systems*, vol. 49, no. 4, pp. 33-41, 2009.
- [53] R. Ramanathan, An exploratory study of marketing, physical and people related performance criteria in hotels, *International Journal of Contemporary Hospitality Management*, vol. 24, no. 1, pp. 44-61, 2012.
- [54] P. Ramirez-Correa, Rondan-Cataluña, F.J., Arenas-Gaitan, J., Exploration of the factors that affect the adoption of social networking services by generation y in Chile, *Interciencia*, vol. 38, no. 9, pp. 628-633, 2013.
- [55] M. L. Richins, Negative word-of-mouth by dissatisfied consumers: a pilot study, *The Journal of Marketing*, vol. 47, no. 1, pp. 68-78, 1983.
- [56] S. Senecal and J. Nantel, The influence of online product recommendations on consumers' online choices, *Journal of Retailing*, vol. 80, no. 2, pp.159-169, 2004.
- [57] P. Sombutpibool, The adoption of social networks in Thailand, *Journal of Information Technology Impact*, vol. 11, no. 1, pp. 1-34, 2011.
- [58] J. K. Song and Y. J. Kim, Social influence process in the acceptance of a virtual community service, *Information Systems Frontiers*, vol. 8, no. 3, pp. 241-252, 2006.
- [59] K. Song, A. M. Fiore and J. Park, Telepresence and fantasy in online apparel shopping experience, *Journal of Fashion Marketing and Management*, vol. 11, no. 4, pp. 553-570, 2007.
- [60] J. Steuer, Defining virtual reality - dimensions determining telepresence, *Journal of Communication*, vol. 42, no. 4, pp. 73-93, 1992.
- [61] K.-S. Suh and S. Chang, User interfaces and consumer perceptions of online stores: The role of telepresence, *Behaviour & Information Technology*, vol. 25, no. 2, pp. 99-113, 2006.
- [62] B. M. Sukoco and W. Y. Wu, The effects of advergames on consumer telepresence and attitudes: A comparison of products with search and experience attributes, *Expert Systems with Applications*, vol. 38, no. 6, pp. 7396-7406, 2011.
- [63] R. Trivers, The evolution of reciprocal altruism, *The Quarterly Review of Biology*, vol. 46, no. 1, pp. 35-57, 1971.
- [64] M. Trusov, R. E. Bucklin and K. Pauwels, Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site, *Journal of Marketing*, vol. 73, no. 5, pp. 90-102, 2009.
- [65] G. Walsh and S. E. Beatty, Customer-based corporate reputation of a service firm: scale development and validation, *Journal of the Academy of Marketing Science*, vol. 35, no. 1, pp. 127-143, 2007.
- [66] J. C. Wang and C. H. Chang, How online social ties and product-related risks influence purchase intentions: A Facebook experiment, *Electronic Commerce Research and Applications*, vol. 12, no. 5, pp. 337-346, 2013.
- [67] I. Wen, Factors affecting the online travel buying decision: a review, *International Journal of Contemporary Hospitality Management*, vol. 21, no. 6, pp. 752-765, 2009.
- [68] R. Williams, T. van der Wiele, J. van Iwaarden, and S. Eldridge, The importance of user-generated content: the case of hotels, *The TQM Journal*, vol. 22, no. 2, pp. 117-128, 2010.
- [69] Z. Xiang and U. Gretzel, Role of social media in online travel information search, *Tourism Management*, vol. 31, no. 2, pp. 179-188, 2010.

- [70] K. Q. Xu, X. T. Guo, J. X. Li, R. Y. K. Lau, and S. S. Y. Liao, Discovering target groups in social networking sites: An effective method for maximizing joint influential power, *Electronic Commerce Research and Applications*, vol. 11, no. 4, pp. 318-334, 2012.
- [71] W. Yi, J. Sung and K. Cho, The effect of user experience factors of tablet devices on behavioral intention to purchase in the experience zone, in *Human Centric Technology and Service in Smart Space* (J. J. Park, Q. Jin, M. S.-S. Yeo, and B. Hu, Eds.). Dordrecht, Netherlands: Springer, 2012, pp. 25-36.

Appendix A: Measuring Instrument

Use (USE)

- USE 1. I tend to use the SNS frequently
- USE 2. I spend a lot of time on SNS
- USE 3. I exert myself with SNS

Social identity (SI)

- SI 1. As a member of the community, my position is very important to me
- SI 2. As a member of the community, I am the type of person who likes to engage in my community
- SI 3. Activities in my community are the important part in my life

Altruism (ALT)

- ALT 1. I tend to encourage people who are in a real crisis or need
- ALT 2. I usually help them with a solution when people ask me for one
- ALT 3. I congratulate people when they tell me good news

Telepresence (TELE)

- TELE 1. When the SNS ends, I feel like I have actually met other people
- TELE 2. I feel that the SNS creates a new world
- TELE 3. While engaged with the SNS, I felt I was in a different society
- TELE 4. While engaged with the SNS, the SNS world was more real or present to me compared to the real world

Word-of-Mouth (WOM)

- WOM1: I'm likely to say good things about this company
- WOM2: I would recommend this company to my friends and relatives
- WOM3: If my friends were looking for a new company of this type, I would tell them to try this place